Product Overview

SIP-5ng / AsXSn is a flame-retardant self-supporting insulated aerial wire designed for low-voltage overhead power distribution networks. It features stranded aluminium conductors and UV-resistant cross-linked polyethylene insulation formulated with flame-retardant properties.

The insulated conductors are twisted together in a right-hand direction, with a twisting pitch not exceeding 450 mm. The design is intended for overhead power lines and electrical distribution networks with a rated voltage of 0.6/1 kV and a frequency of up to 50 Hz.

SIP-5ng is suitable for residential power distribution, overhead network construction, and applications where improved fire performance and reduced electrical clearances are required.

Construction

- **Conductor:** Round, stranded, compacted or sealed aluminium conductor; nominal cross-sections from 16 to 120 mm².
- **Insulation:** UV-resistant, light-stabilized cross-linked polyethylene (XLPE) with a flame-retardant formulation.
- **Assembly:** Insulated conductors twisted together with a right-hand lay direction and a maximum twisting pitch of 450 mm.
- **Supporting element:** To be confirmed according to the final approved construction.
- **Rated voltage:** 0.6/1 kV.
- **Frequency:** Up to 50 Hz.

Applications

SIP-5ng / AsXSn is designed for:

- Low-voltage overhead power distribution networks.
- Residential and urban electricity supply.
- Overhead power line construction in areas with buildings and other structures.
- Distribution networks requiring flame-retardant insulated conductors.
- Aerial cable installation along building facades, where permitted by applicable installation regulations.

Key Features and Benefits

Flame-Retardant Insulation

The insulation is formulated to resist flame propagation. The applicable flame-retardant test method and performance classification should be confirmed against the project specification.

UV-Resistant XLPE Insulation

Light-stabilized cross-linked polyethylene insulation is designed for outdoor exposure and resistance to ultraviolet radiation.

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Reduced Risk of Electrical Contact

Insulation helps reduce the risk of phase-to-phase contact and accidental contact with nearby objects compared with bare overhead conductors, subject to the applicable installation requirements.

Compact Overhead Installation

The insulated bundled construction can help optimize overhead line arrangements and may allow reduced installation clearances where permitted by local regulations.

Aluminium Conductors

Stranded aluminium conductors provide an economical, lightweight solution for low-voltage overhead power distribution.

Building-Facade Installation

The cable may be installed along building facades in accordance with the relevant electrical installation rules and project requirements.

Technical Specifications

Parameter	Specification
Product designation	SIP-5ng / AsXSn
Conductor material	Aluminium
Conductor construction	Stranded, round
Conductor cross-section	16–120 mm²
Insulation	Light-stabilized, flame-retardant XLPE
Rated voltage	0.6/1 kV
Frequency	Up to 50 Hz
Conductor assembly	Twisted insulated conductors
Twisting direction	Right-hand
Maximum twisting pitch	450 mm
Installation	Overhead power distribution

Electrical Characteristics

Nominal conductor cross-section (mm²)	Permissible load current (A), maximum	One-second short-circuit current (kA), reference
16	100	1.5
25	130	2.3
35	160	3.2
50	195	4.6
70	240	6.5

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95	300	8.8
120	340	10.9

Current-carrying capacity depends on installation conditions, ambient temperature, conductor arrangement, and applicable standards. Short-circuit values and their calculation conditions should be verified before use in project design.

Mechanical and Dimensional Characteristics

Cable designation	Nominal conductor diameter (mm)	Overall diameter (mm)	Approx. weight (kg/km)	Minimum breaking strength (kN)	Nominal insulation thickness (mm)
SIP-5ng 2×16	4.8	16.8	138.1	5.0	1.2
SIP-5ng 4×16	4.8	20.2	276.2	9.8	1.2
SIP-5ng 4×25	6.0	23.4	400.5	15.4	1.2
SIP-5ng 4×35	7.0	26.1	521.2	21.5	1.2
SIP-5ng 4×50	8.4	30.9	730.8	30.7	1.4
SIP-5ng 4×70	9.8	34.6	983.1	43.0	1.6
SIP-5ng 4×95	11.6	39.9	1,304.6	58.4	1.7
SIP-5ng 4×120	13.0	43.6	1,624.4	73.7	1.7

Dimensional, weight, and mechanical values are based on the supplied reference data and should be confirmed against the approved manufacturing drawings and test reports.

Why Choose QZ Cable?

QZ Cable is a cable and conductor manufacturer established in 1969 and part of QZ Group.

We support cable supply for power distribution and infrastructure projects, with product configurations available according to confirmed technical specifications, applicable standards, and project requirements.

- Manufacturer-direct supply.
- Technical specification review and drawing-based production support.
- Solutions for overhead power distribution networks.
- Technical documentation available according to the confirmed product configuration.

Frequently Asked Questions

1. What is SIP-5ng cable used for?

SIP-5ng is designed for low-voltage overhead power distribution networks, including residential and urban electricity supply applications.

2. What is the rated voltage of SIP-5ng?

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The supplied product information specifies a rated voltage of 0.6/1 kV and a frequency of up to 50 Hz.

3. What conductor material is used in SIP-5ng?

The supplied construction specifies stranded aluminium conductors.

4. Is SIP-5ng insulation flame-retardant?

The supplied description identifies the insulation as a flame-retardant, light-stabilized cross-linked polyethylene compound. The specific flame-retardant test standard and classification should be confirmed for each order.

5. What conductor sizes are available?

The supplied data covers nominal conductor cross-sections from 16 to 120 mm². Other configurations should be confirmed according to manufacturing capability and project requirements.

6. Can SIP-5ng be installed along building facades?

It may be used for building-facade installation where permitted by local electrical installation regulations and the project design.

Contact QZ Cable for technical specifications, drawings, and project-based quotations.

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